

Amendments to the Claims

Claim 1 (Currently amended): Seed of hybrid maize variety designated X1139Y, representative seed of said variety having been deposited under ATCC Accession number [[____]]PTA-5455.

Claim 2 (Previously presented): A maize plant, or ~~its parts~~ a part thereof, produced by growing the seed of claim 1.

Claim 3 (Original): Pollen of the plant of claim 2.

Claim 4 (Original): An ovule of the plant of claim 2.

Claims 5-76 (Canceled)

Claim 77 (Previously presented): A tissue culture of regenerable cells produced from the plant of claim 2.

Claim 78 (Previously presented): Protoplasts produced from the tissue culture of claim 77.

Claim 79 (Previously presented): The tissue culture of claim 77, wherein cells of the tissue culture are from a tissue selected from the group consisting of leaf, pollen, embryo, root, root tip, anther, silk, flower, kernel, ear, cob, husk and stalk.

Claim 80 (Currently amended): A maize plant regenerated from the tissue culture of claim 77, said plant having all the morphological and physiological characteristics of hybrid maize plant X1139Y, representative seed of said plant having been deposited under ATCC Accession No. [[____]]PTA-5455.

Claim ~~82~~81 (Currently amended): A method for producing an F1 hybrid maize seed, comprising crossing the plant of claim 2 with a different maize plant and harvesting the resultant F1 hybrid maize seed.

Claim ~~83~~82 (Currently amended): A method of producing a male sterile hybrid maize plant comprising transforming at least one of inbred maize parent plants GE565937 and GE502199, representative samples of which have been deposited as [[_____] and _____] PTA-5523 and PTA-607 respectively, with a nucleic acid molecule that confers male sterility and crossing said inbred maize parent plants to produce said male sterile hybrid maize plant.

Claim ~~84~~83 (Currently amended): A male sterile maize hybrid plant produced by the method of claim ~~83~~82.

Claim ~~85~~84 (Currently amended): A method of producing an herbicide resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE565937 and GE502199, representative samples of which have been deposited as [[_____] and _____] PTA-5523 and PTA-607 respectively, with a transgene that confers herbicide resistance to generate an herbicide resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said herbicide resistant hybrid maize plant.

Claim ~~86~~85 (Currently amended): An herbicide resistant hybrid maize plant produced by the method of claim ~~85~~84.

Claim ~~87~~86 (Currently amended): The herbicide resistant hybrid maize plant of claim ~~86~~85, wherein the transgene confers resistance to an herbicide selected from the group consisting of: imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

Claim ~~88~~87 (Currently amended): A method of producing an insect resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE565937 and

GE502199, representative samples of which have been deposited as [[_____ and _____]] PTA-5523 and PTA-607 respectively, with a transgene that confers insect resistance to generate an insect resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said insect resistant hybrid maize plant.

Claim ~~8988~~ (Currently amended): An insect resistant maize plant produced by the method of claim ~~8887~~.

Claim ~~9089~~ (Currently amended): The insect resistant maize plant of claim ~~8988~~, wherein the transgene provides a *Bacillus thuringiensis* endotoxin.

Claim ~~9190~~ (Currently amended): A method of producing a disease resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE565937 and GE502199, representative samples of which have been deposited as [[_____ and _____]] PTA-5523 and PTA-607 respectively, with a transgene that confers disease resistance to generate a disease resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said disease resistant hybrid maize plant.

Claim ~~9291~~ (Currently amended): A disease resistant hybrid maize plant produced by the method of claim ~~9190~~.

Claim ~~9392~~ (Currently amended): A method of producing a hybrid maize plant with decreased phytate content comprising transforming at least one of inbred maize parent plants GE565937 and GE502199, representative samples of which have been deposited as [[_____ and _____]] PTA-5523 and PTA-607 respectively, with a transgene encoding phytase to generate an inbred maize parent plant with decreased phytate content and crossing said inbred maize parent plants to produce said hybrid maize plant that confers decreased phytate content.

Claim ~~9493~~ (Currently amended): A hybrid maize plant with decreased phytate content produced by the method of claim ~~9392~~.

Claim 9594 (Currently amended): A method of producing a hybrid maize plant with modified fatty acid metabolism or modified carbohydrate metabolism comprising transforming at least one of inbred maize parent plants GE565937 and GE502199, representative samples of which have been deposited as [[_____] and _____]PTA-5523 and PTA-607 respectively, with a transgene encoding a protein selected from the group consisting of stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme to generate an inbred maize parent plant with modified fatty acid metabolism or modified carbohydrate metabolism and crossing said inbred maize parent plants to produce said hybrid maize plant that confers modified fatty acid metabolism or modified carbohydrate metabolism.

Claim 9695 (Currently amended): A hybrid maize plant produced by the method of claim 9594.

Claim 9796 (Currently amended): The hybrid maize plant of claim 9695, wherein the transgene confers a trait selected from the group consisting of waxy starch and increased amylose starch.

Claim 9897 (Currently amended): A maize plant, or a part thereof, having all the physiological and morphological characteristics of the hybrid maize plant X1139Y, representative seed of said plant having been deposited under ATCC Accession No. [[_____]PTA-5455.

Claim 9998 (Currently amended): A method of introducing a desired trait into a hybrid maize ~~line~~ variety X1139Y comprising:

(a) crossing at least one of inbred maize parent plants GE565937 and GE502199, representative samples of which have been deposited under ATCC Accession Nos. as [[_____] and _____]PTA-5523 and PTA-607 respectively, with another maize line that comprises a desired trait, to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance, disease resistance and waxy starch;

- (b) selecting said F1 progeny plants that have the desired trait to produce selected F1 progeny plants;
- (c) backcrossing the selected progeny plants with said inbred maize parent plant to produce backcross progeny plants;
- (d) selecting for backcross progeny plants that have the desired trait and morphological and physiological characteristics of said inbred maize parent plant;
- (e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants;
- (f) crossing said fourth or higher backcross progeny plant with the other inbred maize parent plant to generate a hybrid maize ~~line~~ variety X1139Y with the desired trait and all of the morphological and physiological characteristics of hybrid maize ~~line~~ variety X1139Y listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim ~~100~~99 (Currently amended): A plant produced by the method of claim ~~99~~98, wherein the plant has the desired trait and all of the physiological and morphological characteristics of hybrid maize ~~line~~ variety X1139Y listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim ~~101~~100 (Currently amended): The plant of claim ~~100~~99 wherein the desired trait is herbicide resistance and the resistance is conferred to an herbicide selected from the group consisting of: imidazolinone, sulfonyleurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

Claim ~~102~~101 (Currently amended): The plant of claim ~~100~~99 wherein the desired trait is insect resistance and the insect resistance is conferred by a transgene encoding a *Bacillus thuringiensis* endotoxin.

Claim ~~103~~102 (Currently amended): The plant of claim ~~100~~99 wherein the desired trait is male sterility and the trait is conferred by a cytoplasmic nucleic acid molecule that confers male sterility.

Claim ~~104~~103 (Currently amended): A method of modifying fatty acid metabolism, phytic acid metabolism or carbohydrate metabolism in a hybrid maize ~~line~~ variety X1139Y comprising:

(a) crossing at least one of inbred maize parent plants GE565937 and GE502199, representative samples of which have been deposited under ATCC Accession Nos. as [[and]] PTA-5523 and PTA-607 respectively, with another maize line that ~~comprise~~ comprises a nucleic acid molecule encoding an enzyme selected from the group consisting of phytase, stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme;

(b) selecting said F1 progeny plants that have said nucleic acid molecule to produce selected F1 progeny plants;

(c) backcrossing the selected progeny plants with said inbred maize parent plant to produce backcross progeny plants;

(d) selecting for backcross progeny plants that have said nucleic acid molecule and morphological and physiological characteristics of said inbred maize parent plant;

(e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants;

(f) crossing said fourth and higher backcross progeny plant with the other inbred maize parent plant to generate a hybrid maize ~~line~~ variety X1139Y that comprises said nucleic acid molecule and has all of the morphological and physiological characteristics of hybrid maize ~~line~~ variety X1139Y listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim ~~105~~104 (Currently amended): A plant produced by the method of claim ~~104~~103, wherein the plant comprises the nucleic acid molecule and has all of the physiological and morphological characteristics of hybrid maize ~~line~~ variety X1139Y listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim ~~106~~105 (Currently amended): A method for producing a maize seed, comprising crossing the plant of claim 2 with itself or a different maize plant and harvesting the resultant maize seed.